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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,619	10/30/2001	Michael Eneboe	01-489	5263

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EXAMINER

THOMPSON, ANNETTE M

ART UNIT

PAPER NUMBER

2825

DATE MAILED: 08/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/021,619

Applicant(s)

ENEBOE ET AL.

Examiner

A. M. Thompson

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2001 - 26 April 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8, 12, 16, 19-21, 23, 26, 27, 29, 30 and 32 is/are rejected.
- 7) ☒ Claim(s) 5, 7, 9-11, 13-15, 17, 18, 22, 24, 25, 28, 31 and 33-36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3,4
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This application 10/021,619 has been examined. Claims 1-36 are pending.

Specification

1. The disclosure is objected to because of the following informalities: at page 2, please reformat paragraph 1, inserting the application numbers (and Patent numbers, if applicable), and deleting the Express mail number information.

Appropriate correction is required.

2. The title of the invention is not descriptive. There are infinite systems and methods for designing an integrated circuit. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

3. Claims 14, 15, and 29 are objected to for the following reasons: Pursuant to claim 14, at line 2, correct misspelling of *interscalable*. Pursuant to claim 14, at line 2, delete the "an". Pursuant to claim 15, end the limitation with a period. Pursuant to claim 29, Applicants should change "processor" to *microprocessor* to correspond with Applicants' specification. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Rejection of Claims 1-4, 6, 8, 12, 16, 19-21, 23, 26, 27, 29, 30, 32

5. **Claims 1-4, 6, 8, 12, 16, 19-21, 23, 26, 27, 29, 30, 32** are rejected under 35 U.S.C. 102(e) as being anticipated by Rostoker et al., U.S. Patent 6,470,482.

6. Pursuant to claim 1 which recites [a] method for designing an integrated circuit (col. 7, ll. 20-27), comprising manipulating representations of components of an integrated circuit on a display device by a user (col. 9, ll. 35-67); specifying an interconnect (col. 10, ll. 1-8 disclose interconnect) having a characteristic between a first represented component and a second represented component (col. 10, ll. 1-8 disclose parameters of nets); and extracting data suitable for describing the specified interconnect between the first represented component and the second represented component (col. 10, ll. 1-8, wherein some or all of the parameter data may be used for simulation purposes).

7. Pursuant to claim 2, wherein at least one of the first component and the second component includes at least one of a cell, block and core (col. 14, ll. 37-58).

8. Pursuant to claim 3, wherein the extracted data is programmed into a self-programmable integrated circuit to provide the specified interconnect (col. 14, ll. 46-66).

9. Pursuant to claim 4, wherein the extracted data is utilized to synthesize an integrated circuit having the specified interconnect (col. 10, ll. 58-64; col. 18, ll. 28-35).

10. Pursuant to claim 6, wherein the extracted data is formatted in a hardware description language (col. 8, ll. 1-30 discloses VHDL).

11. Pursuant to claim 8, further comprising optimizing the components and interconnects (col. 12, ll. 14-34).

12. Pursuant to claim 12 wherein the integrated circuit is at least one of an ASIC and multiple ASICs (col. 14, line 27 to col. 15, line 3).

13. Pursuant to claim 16, it incorporates the limitations of claim 1 and further discloses a system for designing an integrated circuit. Rostoker '482 additionally discloses such a system (col. 8, ll. 32-48) and therefore claim 16 is likewise rejected using the rationale of claim 1, *supra*.

14. Pursuant to claims 19-21, these claims incorporate the limitations already rejected in claims 2-4 and are therefore likewise rejected based on the same rejection rationale, *supra*.

15. Pursuant to claim 23 which recites a system for designing an integrated circuit, Rostoker discloses the limitations of this claim in Figure 15 which illustrates a display device (1606), a processor (1602) and an integrated circuit communicatively coupled to the processor (through the simulation accelerator (1614)).

16. Pursuant to claims 26 and 27, these claims incorporate the limitations rejected in claims 2 and 4, respectively, and therefore claims 26 and 27 are likewise rejected based on the same rejection reasoning.

17. Pursuant to claim 29 which recites an ASIC comprising components (see Fig. 20b and Fig. 20c).

18. Pursuant to claim 30, wherein the components includes at least a cell, block and core (Fig. 20b and (col. 14, ll. 37-58).

19. Pursuant to claim 32, wherein the processor is suitable for self-programming to enable ASIC optimization (col. 14, ll. 46-66).

Allowable Subject Matter

20. **Claims 5, 7, 9-11, 13-15, 17, 18, 22, 24, 25, 28, 31, 33-36** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

21. The reasons for the indication of allowable subject matter are disclosed by the limitations of the objected to claims and include no disclosure in the prior art of the extracted data for specified interconnect including a direct connectivity; or the specified characteristic including bandwidth, latency and scalability.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please reference the PTO-892 for a complete listing.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to A.M. Thompson whose telephone number is (703) 305-7441. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 5:00 p.m.. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matthew S. Smith, can be reached on (703) 308-1323.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956 or the Customer Service Center whose telephone number is (703) 306-3329.

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23. Responses to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9318, (for **OFFICIAL** communications intended for entry)

(703) 872-9319, (for Official **AFTER-FINAL** communications)

Hand-delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).



A. M. THOMPSON
Patent Examiner